

OAK RIDGE RESERVATION ENVIRONMENTAL
MANAGEMENT SITE SPECIFIC ADVISORY BOARD



1998

A N N U A L R E P O R T

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Published October 1998

Oak Ridge Reservation Environmental Management Site Specific Advisory Board
P.O. Box 2001, EM 90, Oak Ridge, TN 37831

WELCOME TO THE 1998 ORREMSSAB ANNUAL REPORT



This has been an eventful year in the young life of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB), and many changes have taken place in our membership, our structure, and the way we do business. The year has been full of interesting events and important issues, and we made a large number of recommendations to the Department of Energy.

Major highlights and accomplishments of the year include the following:

William M. Pardue, Chair

- The Board approved the community guidelines and recommendations developed by the End Use Working Group for many of the contaminated sites on the Oak Ridge Reservation and submitted them to DOE. These guidelines and recommendations are expected to be fundamental to remediation of the reservation.
- The Board approved the recommendations of the End Use Working Group's Stewardship Committee and submitted them to DOE. The committee's *Stakeholder's Report on Stewardship* was a groundbreaking study of this important topic.
- The Board sponsored a public information meeting on the reindustrialization of the East Tennessee Technology Park (ETTP) in April 1998, providing an important forum for discussion on a topic that will prove pivotal in remediation of the site.
- The Board exerted considerable effort to prepare a recommendation for DOE to conduct a medical research project involving workers and nearby residents potentially exposed to radioactive materials and toxins existing on the reservation.
- The Board continued to pursue its request that EPA perform a Toxic Release Inventory survey for the Oak Ridge area.
- The Board sponsored a public meeting on the Toxic Substances Control Act Incinerator, at which Bill Rickman, a world-renowned incinerator expert, presented his findings on the incinerator.
- The Board dramatically stepped up the pace of our outreach efforts, not only to the public but to other SSABs and Citizens Advisory Boards throughout the country, in an effort to increase dialog on topics that affect us all.

This year we reorganized our committee structure from one that addressed broad subjects, such as Waste Management, Environmental Restoration, and Environmental Justice, to one that was more focused, with project teams addressing specific subjects, such as ETTP Remediation and Reindustrialization. This allowed for a more comprehensive review of major issues of current interest, made decisions on areas of responsibility within the Board easier, and reduced the tendency to spread ourselves too thin by looking at too many issues at once.

Our membership also changed this year in a major way. By the end of Fiscal Year (FY) 1997, we had lost 9 of our original 19 members through normal attrition. Eight new members joined the Board at the start of the current fiscal year, but during the year we had lost another four. We have requested that DOE promptly appoint replacements, giving high priority to achieving diversity and broad public representation on the Board.

The changes wrought during the past year have significantly altered the Board and the way we do business. As we enter FY 1999, we do so with a more focused purpose and a strong commitment to our mission. With so many new members and so many opportunities and challenges facing us, I'm sure it will be as exciting a year as 1998 proved to be.

A handwritten signature in dark ink, appearing to read "William M. Pardue".

William M. Pardue
Chair

GENERAL INFORMATION

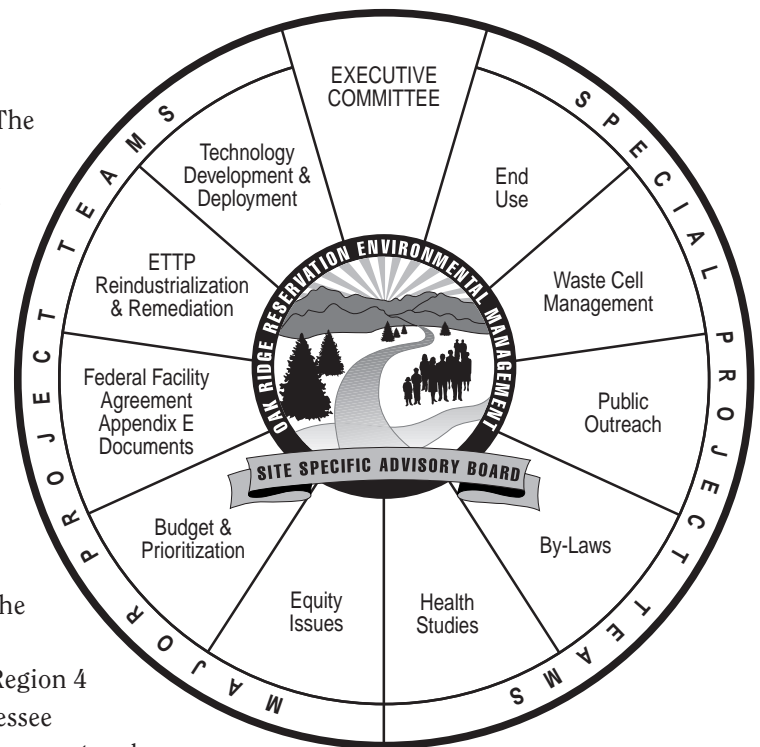
The Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) is a volunteer citizens' panel that provides advice and recommendations to the U.S. Department of Energy (DOE) on its Oak Ridge Environmental Management (EM) Program. The group was formed in 1995 and chartered under the Federal Advisory Committee Act.

The Board is dedicated to providing informed recommendations and advice to DOE regarding environmental restoration, waste management, future land use, and economic development of specified areas; recommendations concerning health and safety, environmental justice, and other topics may be included as the Board determines appropriate. The Board is also committed to serving as a communications link between the public and relevant government agencies.

The Board is composed of up to 20 members, chosen to reflect the diversity of gender, race, occupation, and interests of persons living near the Oak Ridge

Reservation (ORR). The Board currently consists of 15 voting members from five counties: Anderson, Knox, Loudon, Meigs, and Roane. Non-voting members include representatives from the DOE-Oak Ridge Operations (DOE-ORO) Office; the U.S. Environmental Protection Agency, Region 4 (EPA); and the Tennessee Department of Environment and Conservation (TDEC). These members advise the Board on their respective agency's policies and views.

ORREMSSAB provides a number of avenues for the public to learn and express views about DOE-ORO EM work. All Board and project team meetings are open to the public and are announced in newspaper advertisements and in the *Federal Register*, at the Information Resource Center (IRC) in Oak Ridge, and through the Board's 24-hour information line: 423-576-4750.



Board meetings are video recorded, and copies of the tapes are available for public review. The Board maintains a Web site at <http://www.oakridge.doe.gov/em/ssab>, where other information can be found. Information is also available by calling 1-800-382-4582, Monday-Friday, 8:00 a.m.- 5:00 p.m. EST.

BOARD MEETINGS

The Board meets monthly to hear presentations by persons working on relevant environmental management topics, listen to and discuss input from concerned citizens, consider recommendations to DOE prepared by the various ORREMSSAB project teams, and conduct other business. Board business is conducted under Roberts Rules of Order. See Appendix A for a listing of FY 1998 Board meetings.

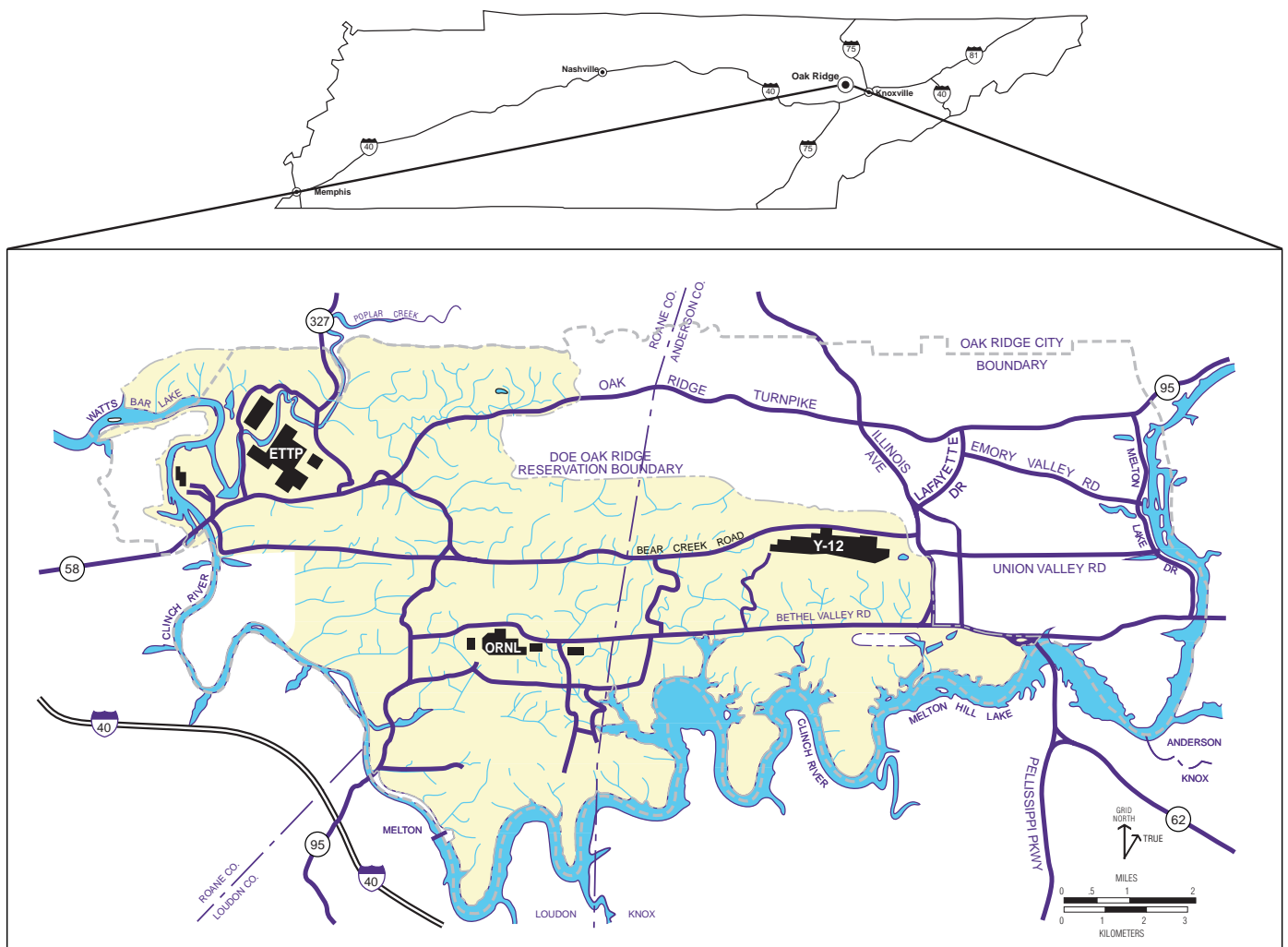
PROJECT TEAMS

At the start of FY 1998, the Board established standing project teams to review issues concerning five topic areas: Budget & Prioritization, Equity Issues, East Tennessee Technology Park (ETTP) Remediation and Reindustrialization, Federal Facility Agreement (FFA) Appendix E Documents, and Technology Development & Deployment. Several special teams

have also been formed to address special issues: Bylaws, End Use, Health Studies, Public Outreach, and Waste Cell Management. Standing and special project teams meet monthly, and all meetings are open to the public.

FY 1998 BOARD OFFICERS

Chair: Bill Pardue; Vice-Chair: Bob Peelle; Secretary: Peter Hillis.



Map of the Oak Ridge Reservation showing East Tennessee Technology Park [ETTP (formerly the K-25 Site)], Oak Ridge National Laboratory (ORNL), and the Oak Ridge Y-12 Plant (Y-12).

BOARD ACTIVITIES

FY 1998 RECOMMENDATIONS

In FY 1998 the Board studied a variety of issues related to DOE EM activities. Review of an issue usually begins in the project teams, which prepare draft recommendations for Board review and approval. The review process often includes detailed briefings in an open forum where Board members may ask questions and discuss their views. All meetings are open to public participation and comment, which is an integral part of the ORREMSSAB

study and recommendation process. Each monthly Board meeting includes time for public input and response, and citizens attending the meetings are invited to ask questions and express views following technical briefings.

Following is a list of the recommendations submitted to DOE-ORO during FY 1998. See Appendix B for recommendation text. A brief history of each

recommendation and DOE's response are also included. Complete text of all recommendations is available at the IRC and on the Board's Web page. Recommendations 4, 5, 8, 9, 13, 14, and 15 were generated by the End Use Working Group (EUWG)—an independent group formed by ORREMSSAB in early 1997 to study future uses for contaminated areas on the ORR.

FY 1998 RECOMMENDATIONS		
Number	Recommendation	Date Issued
1	TSCA Incinerator Waste Streams Management	10/1/97
2	Sequencing of EM Activities on the ORR	11/5/97
3	Conduct of an ORR Health Effects Study	12/3/97
4	Community Guidelines for End Use of Contaminated Properties on the ORR	1/7/98
5	End Use Recommendation for the Disposal Areas in Melton Valley	1/7/98
6	DOE's Social, Economic, and Cultural Category	3/4/98
7	On-Site Waste Disposal Facility on the ORR	3/4/98
8	End Use for Contaminated Lands in Bethel Valley Area of ORNL	3/4/98
9	End Use for Bear Creek Valley West of the Y-12 Plant	3/4/98
10	Accuracy in Describing Relationships Between Oak Ridge Reservation, City of Oak Ridge, and Surrounding Populated Areas	4/1/98
11	Comments on DOE's Draft Accelerating Cleanup Paths to Closure, Dated February 1998	4/1/98
12	Comments and Recommendations on the Bear Creek Valley Feasibility Study and Proposed Plan	5/6/98
13	End Use Recommendations for Y-12 Plant, Chestnut Ridge, and Upper East Fork Poplar Creek	6/3/98
14	End Use Recommendation for Sites Not Included in Existing Watersheds	7/8/98
15	End Use Recommendation for East Tennessee Technology Park	7/8/98
16	Approval of the End Use Working Group's Final Report	8/5/98
17	Approval of the End Use Working Group's <i>Stakeholder Report on Stewardship</i>	8/5/98
18	Use of In Situ Vitrification on the ORR	9/8/98

BOARD CORRESPONDENCE

LETTER TO DOE,
DATED 12/3/97:

EVALUATION OF DOE/EM PUBLIC PARTICIPATION PLAN IN 1997

At the request of the Assistant Manager of the DOE-ORO EM Program, ORREMSSAB agreed to evaluate the EM public participation program. The evaluation consisted of four components: (1) a suggestion that DOE perform a self-evaluation using criteria modified from the “attributes of success” found in the report of Carnes et al.¹, (2) a discussion of Board experiences that pertain to these attributes, (3) a review of DOE’s January 27, 1997, Public Involvement Plan, and (4) the benefits to DOE of including ORREMSSAB in the local public participation program.

¹ S. A. Carnes, M. Schweitzer, E. Peelle, A. Wolfe, and J. F. Munro, *Performance Measures for Public Participation in DOE’s Office of Environmental Management*, Oak Ridge National Laboratory report ORNL-6905, August 1996.

LETTER TO DOE,
DATED 3/4/98:

PRIORITIZATION REVIEW WORKSHOP, JANUARY 10, 1998

The goals of the workshop were to (1) review the DOE-ORO EMBAM or risk-based budget prioritization system; (2) decide if the six EMBAM categories and their respective weighting factors were appropriate; (3) review the DOE-assigned risk scores for selected remediation plan subprojects; (4) discuss factors that can result in changes to ranking, scope, and budget of/for subprojects; and (5) rank selected remediation subprojects to compare rankings of the workshop attendees and those of DOE. After the attendees reviewed and evaluated the budget/prioritization/sequencing process used by DOE-ORO EM, they gained a better understanding and acceptance of the use of expenditures for remediation activities.

LETTER TO HONORABLE
FREDERICO PEÑA,
SECRETARY OF ENERGY,
DATED 5/8/98:

LEGACY AND CERCLA WASTES

The letter expressed ORREMSSAB’s concern about the current situation regarding disposal of legacy and CERCLA waste from the ORR. Oak Ridge has extremely large quantities of such waste in forms requiring final disposition. Residents are prepared to accept a balanced approach to the problem, including disposal of wastes that meet proper WAC in an on-site engineered cell, with proper regulatory approval. However, a significant amount of the local waste is of a nature that precludes its safe disposal under the geology and hydrology conditions of East Tennessee. These wastes, by agreement among DOE, EPA, TDEC, and local citizens, must be removed, transported, and disposed of in proper facilities elsewhere.

LETTER TO U.S. SENATOR STROM THURMOND, U.S. SENATOR PETE DOMENICI, AND U.S. REPRESENTATIVE JOSEPH M. MCDADE, DATED 5/15/98:

DOE BUDGET REDUCTIONS

This letter expressed ORREMSSAB expectations that Congress, the Office of Management and Budget, and DOE provide adequate funding to meet their CERCLA obligations to promptly clean up hazardous substances to a degree that is protective of human health and the environment. ORREMSSAB and the public have worked closely with DOE-ORO EM to develop reasonable budget requirements, and ORREMSSAB demands that the ORO EM budget of \$563 million for FY 1999 be funded as submitted. In addition, ORREMSSAB finds that current out-year Office of Management and Budget targets are inadequate.

LETTER TO DOE, DATED 9/4/98:

COMMENT PERIOD ON DOE DRAFT DOCUMENTS

One facet of ORREMSSAB's mission is to prepare comments on relevant DOE draft documents. This task, however, is often difficult or impossible due to the time constraints imposed by DOE. Federal Advisory Committee Act constraints (such as the requirements for advertising meetings and established monthly cycle for SSAB operations) and late delivery of documents add to the problem. In this letter to DOE, the Board recommended that a minimum of 60 days and preferably

90 days be allowed by DOE for comment on documents. The letter also requested that DOE program staff (1) advise SSABs in advance of their intent to seek comments on specific documents and the approximate date of release for comment, (2) supply copies of documents for which they desire SSAB input directly to the SSABs on the date of their availability, and (3) allow sufficient time in the cycle to accommodate SSAB schedules.

OTHER FY 1998 BOARD ACTIVITIES

BOARD PROCESS DISCUSSION

Todd Barker of the Federal Facilities Environmental Restoration Dialogue Committee facilitated a meeting on February 21, 1998. Mr. Barker presented an overview of the committee's final report dated April 1996, "Consensus Principles and Recommendations for Improving Federal Facilities Cleanup." The Board also discussed consensus and parliamentary procedure models and lessons learned from other SSABs. The Board's bylaws were subsequently amended on "Decision Making" and "Public Involvement."

TOXIC RELEASE INVENTORY GEOGRAPHIC INFORMATION SURVEY

On February 5, 1997, ORREMSSAB requested that EPA Region 4 perform a TRI GIS for the Oak Ridge area and its eight contiguous counties. The goal of this survey is to assess the impact that cumulative toxic releases in the area may have on the general population and to determine whether the environmental justice concerns

of local communities are compromised. In February 1998, ORREMSSAB received a portion of the requested information: TRI mapping data and a summary of cumulative concentrations of TRI chemicals for each county. Further information necessary to complete the survey is forthcoming.

PARTICIPATION IN MEETINGS AND CONFERENCES

ORREMSSAB members made several trips during the year to achieve a variety of goals: (1) gain understanding of relevant technical issues, (2) participate in large group discussion on environmental restoration and waste management policy, (3) discuss subjects of mutual interest with other DOE sites, and (4) develop personal contacts with SSAB counterparts of other sites.

ANNUAL SSAB NATIONAL CHAIRS MEETING, DALLAS, TEXAS, OCTOBER 1997

Members attending: Bill Pardue, Mary Bryan. The main purpose was to meet and talk with other SSAB personnel and DOE staff concerning issues of importance to SSABs complex wide.

NATIONAL TECHNICAL WORKGROUP ANNUAL MEETING, NEWPORT BEACH, CALIFORNIA, NOVEMBER 1997

Members attending: Rikki Traylor, Ken Parks. The National Technical Workgroup, established jointly by EPA and DOE, provided a technical forum to address a variety of technical issues associated with developing and using technologies to treat mixed wastes.

**MEETING WITH EPA
REGION 4, ATLANTA,
GEORGIA, JANUARY 1998**

Members attending: Demetra Nelson, Janice Stokes. The purpose of this trip was to investigate the ability of EPA to perform a TRI GIS for Oak Ridge and its contiguous counties.

**NEVADA TEST SITE
CITIZENS ADVISORY
BOARD, LAS VEGAS,
NEVADA, JANUARY 1998**

Members attending: Bill Pardue, Bob Peelle, Randy Gordon, Charles Washington. The meeting was held to discuss the upcoming low-level waste seminar slated for April.

**WASTE MANAGEMENT 98
CONFERENCE, TUCSON,
ARIZONA, MARCH 1998**

Members attending: Randy Gordon, Charles Washington. The goal of the trip was to gain an understanding of the technologies applicable to waste management.

**FY 1998 INCINERATOR
CONFERENCE, SALT LAKE
CITY, UTAH, MAY 1998**

Members attending: Randy Gordon, Charles Washington. The conference provided a forum for the exchange of state-of-the-art technical information on thermal treatment technologies.

**INTERSITE DISCUSSIONS
ON NUCLEAR MATERIAL
AND WASTE, SAN DIEGO,
CALIFORNIA, AND
CHICAGO, ILLINOIS,
JUNE 1998**

Members attending: Randy Gordon, Bill Pardue, Steve Kopp, Rikki Traylor, Charles Washington. These meetings were held to allow DOE to explain key, upcoming decisions on disposition of nuclear waste and material.

**SIXTH NATIONAL
STAKEHOLDER'S
WORKSHOP, ALEXANDRIA,
VIRGINIA, JUNE 1998**

Members attending: Charles Washington. This workshop addressed a wide range of contractor work force restructuring and community transition issues critical to the future success of DOE.

**MEETING WITH IDAHO
NATIONAL ENGINEERING
AND ENVIRONMENTAL
LABORATORY CITIZENS
ADVISORY BOARD, IDAHO
FALLS, IDAHO, JULY 1998**

Members attending: Bill Pardue and Randy Gordon. The visit, by invitation of the Idaho National Engineering and Environmental Laboratory Citizens Advisory Board, was to gather information about the site and Board operations and improve dialogue between the boards.

**NEVADA TEST SITE LOW-
LEVEL WASTE SEMINAR,
LAS VEGAS, NEVADA,
AUGUST 1998**

Members attending: Bill Pardue, Randy Gordon, Charles Washington. The seminar was designed to focus on the interaction between SSABs on the issue of low-level waste disposition.

**SSAB CHAIRS' MEETING,
BOULDER, COLORADO,
SEPTEMBER 1998**

Members attending: Bill Pardue. Also attending, Marianne Heiskell, DOE Ex-officio, and Sheree Black, SSAB Administrative Assistant. This annual meeting was held in conjunction with the Spectrum 98 conference in Denver. Mr. Pardue participated in the "Issues and Interactions—DOE Citizens Advisory Boards" panel session at Spectrum 98.

**SAVANNAH RIVER SITE
CITIZENS ADVISORY
BOARD VISIT,
SEPTEMBER 1998**

Members attending: Bill Pardue, Randy Gordon. The purpose of the visit was to learn about the Savannah River Site and how the Citizens Advisory Board conducts business.

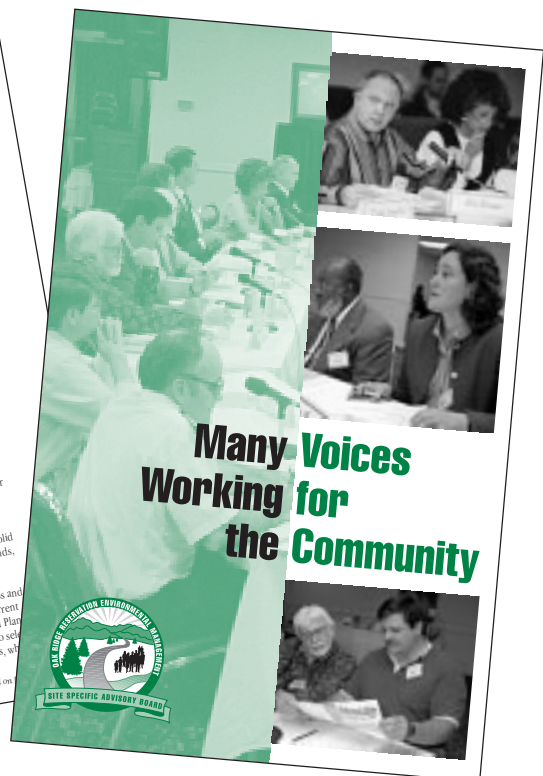
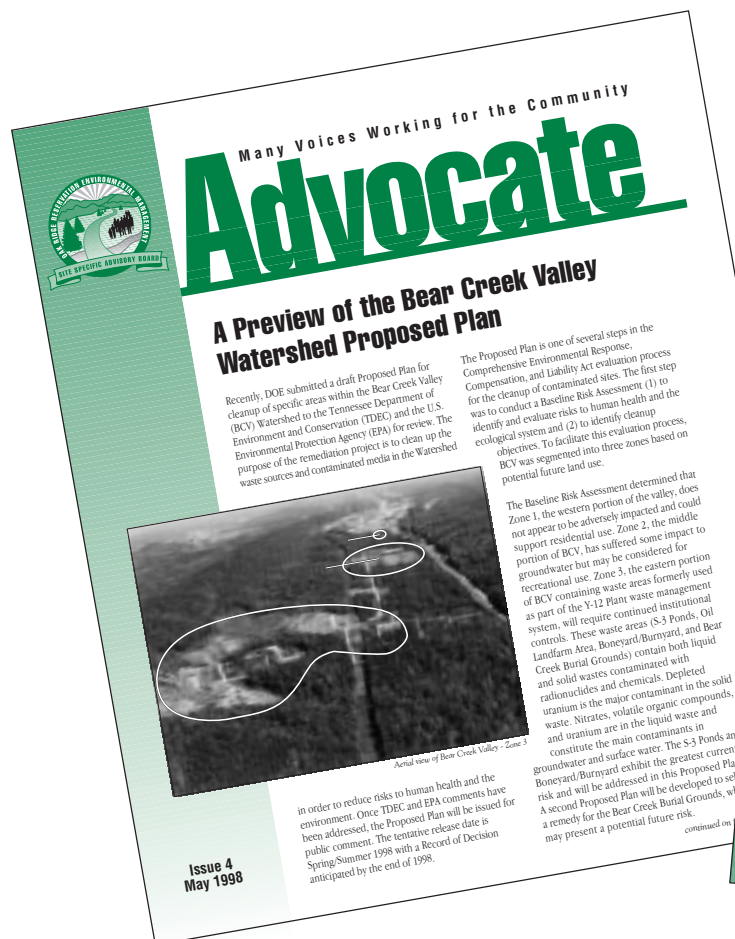
ORREMSSAB PUBLIC OUTREACH

ORREMSSAB invites public participation in Board activities and uses a variety of methods to encourage public involvement. Following are some of the methods and materials used by the Public Outreach Project Team to get the word out about ORREMSSAB and its activities.

Over 800 residents in counties surrounding the ORR receive the

Advocate newsletter. Each issue features articles on DOE's EM activities and information about ORREMSSAB. The Board's **information line**, 423-576-4750, is available 24 hours a day to inform the public of all Board and Committee meetings. General information, meeting schedules, meeting minutes, and much more are available on the **World Wide Web Home Page** at <http://www.oakridge.doe.gov/em/ssab>.

To reach local groups interested in learning more about ORREMSSAB, the Public Outreach Project Team developed a **public presentation**. A foldout brochure and a 6-minute video produced by the team augment the presentation materials, and ORREMSSAB solicits stakeholder opinions through a special **survey form** developed by the team. The Board has also prepared a **traveling display** for use at public meetings.



PROJECT TEAMS

BUDGET & PRIORITIZATION

The objectives of the Budget & Prioritization Team are to (1) develop an understanding of the DOE-ORO EM budget and the prioritization and sequencing processes and serve as a focal point for public involvement in these matters; (2) interact with and informally advise DOE on matters relating to EM budget, prioritization, and sequencing; and (3) prepare related recommendations for formal ORREMSSAB action.

HIGHLIGHTS & ACTIVITIES

Budget Prioritization Review Workshop held on January 10, 1998.

Recommendations: *Sequencing of EM Activities on the ORR*; *DOE's Social, Economic, and Cultural Category*; *Comments on Accelerating Cleanup Paths to Closure*.



Team members, left to right: Steve Kopp; Lorene Sigal, Team Leader; Bill Pardue; Peter Hillis, Co-Team Leader. (Photo #98-265-7)

END USE

The End Use Project Team served as the link between ORREMSSAB and EUWG, an independent group formed by ORREMSSAB in early 1997 to study future uses for contaminated areas on the ORR. The group's report *Final Report of the Oak Ridge Reservation End Use Working Group* was issued in July 1998 and is available at the IRC or by calling the SSAB Support Office at 423-241-3665. EUWG also formed a Stewardship Committee, which issued its report *Stakeholder Report on Stewardship* in July 1998.

HIGHLIGHTS & ACTIVITIES

The following recommendations were forwarded from EUWG to the Board, which then submitted them to DOE: *Community Guidelines for End Use of Contaminated Properties on the ORR*; *End Use for the Disposal Areas in Melton Valley*; *Recommendation to Site a Waste Disposal Facility on ORR*; *End Use for Contaminated Lands in Bethel Valley Area of ORNL*; *End Use for Bear Creek Valley West of the Y-12 Plant*; *End Use Recommendation on the Y-12 Plant, Chestnut Ridge, and Upper East Fork Poplar Creek*; *End Use Recommendation for Sites Not Included in the Existing Administrative Watersheds*; and *End Use Recommendation for the East Tennessee Technology Park*.



Team members, left to right: Bob Peelle; Lorene Sigal, Team Leader; Bill Pardue. (Photo #SSBG2)

ETTP REMEDIATION & REINDUSTRIALIZATION

This team focuses on understanding DOE activities concerning remediation and reindustrialization at ETTP and serving as a focal point for public involvement in these matters. The team identifies and prioritizes issues, obtains appropriate information from a variety of sources, offers informal advice to DOE counterparts, plans public meetings, and prepares draft recommendations for ORREMSSAB action.

HIGHLIGHTS & ACTIVITIES

The team sponsored the public information meeting “Reindustrialization of ETTP” in April 1998. The purpose was to learn how reindustrialization might assist in cleanup of ETTP and impact employment and to increase communication about reindustrialization with the public.



Team members, left to right: Charles Washington, Co-Team Leader; Pat Rush, Team Leader; Jack Bowden; Steve Kopp. Not pictured: Demetra Nelson. (Photo #98-265-10)

FFA APPENDIX E DOCUMENTS

This project team serves as a focal point for timely stakeholder review and comment on FFA Appendix E documents and provides recommendations to DOE concerning those documents. The team selects documents for review that are estimated to have the highest impact on stakeholder concerns. The team uses DOE briefings, individual document review, and open discussions as a basis for formulating recommendations.

HIGHLIGHTS & ACTIVITIES

Recommendation: *Comments and Recommendations on the Bear Creek Valley Feasibility Study and Proposed Plan.*



Team members, left to right: Bob Peelle; Fred Creswick, Team Leader; Donna Campbell. (Photo #98-265-13)

EQUITY ISSUES

Members of the Equity team endeavor to develop an understanding of issues related to how DOE conducts activities across the DOE complex. The team focuses on improving dialog among the DOE sites on issues such as waste management and budget. The team interacts with and informally advises DOE on matters relating to these issues and prepares recommendations for formal ORREMSSAB action.

HIGHLIGHTS & ACTIVITIES

Nevada Test Site CAB meeting on low-level waste, January 1998. Nevada Test Site CAB seminar on low-level waste, August 16-19, 1998. Intersite Discussions (San Diego and Chicago), June 1998.



Team members, left to right: Bill Pardue; Randy Gordon, Team Leader; Jack Bowden, Co-Team Leader; Bob Peelle. (Photo #98-265-1)

PUBLIC OUTREACH

The purposes of this team are to (1) serve as a communication link between ORREMSSAB and the public, (2) educate the public concerning the role of ORREMSSAB, and (3) encourage public participation in ORREMSSAB. The team's approach is to identify individual stakeholders and local groups and choose appropriate vehicles to communicate with them.

HIGHLIGHTS & ACTIVITIES

To reach groups interested in learning more about ORREMSSAB, the team developed presentation materials, a foldout brochure, and an information video. A special survey form was also developed to solicit stakeholder opinion on issues of concern. The team regularly communicates with stakeholders through the *Advocate* newsletter.



Team members, left to right: Peter Hillis, Co-Team Leader; Steve Kopp, Team Leader; Charles Washington. Not pictured: Randy Gordon, Rikki Traylor.

(Photo #98-265-3)

TECHNOLOGY DEVELOPMENT & DEPLOYMENT

The mission of this team involves developing an understanding of DOE technologies presently in development or experimental deployment and serving as a focal point for public involvement in these matters. The team provides DOE advice on (1) identified needs for technology development for the ORR, (2) public support of these identified needs, and (3) effectiveness and appropriateness of identified developing technologies for the ORR.

HIGHLIGHTS & ACTIVITIES

Participation in the National Technical Workgroup Conference on Mixed Waste Technologies and the "In Situ Vitrification: Addressing Stakeholder Concerns" public meeting by Geosafe. Presentation and discussion on the eight demonstration/deployment plans at the ORR.



Team members, left to right: Bill Pardue; Rikki Traylor, Team Leader; Ken Parks, Co-Team Leader; Fred Creswick.

(Photo #SSBG1)

WASTE CELL MANAGEMENT

The purpose of this newly formed team is to study the on-site waste disposal cell being considered for the ORR. Both cell design and waste acceptance criteria will be examined.



Team members, left to right: Bob Peelle; Bill Pardue; Peter Hillis, Team Leader; Steve Kopp; Lorene Sigal. (Photo #98-265-4)

BYLAWS

The Bylaws Special Project Team reviews and provides recommendations to the Board for amending the Board's bylaws and standing rules.

HIGHLIGHTS & ACTIVITIES

In 1998, the team developed a new section in the standing rules on how the Board will make decisions concerning recommendations to forward to DOE. The section also addressed public involvement.



Team members: Rikki Traylor, Team Leader; Peter Hillis. (Photo #SSBG3)

EXECUTIVE COMMITTEE

The ORREMSSAB Executive Committee is composed of Board officers and Project Team Leaders. The Executive Committee meets monthly and has general administrative authority, including budgetary responsibilities, setting of agendas, coordination of project teams work, and such power as may be granted by the Board to transact business as may be necessary between regular meetings. The Executive Committee presents all recommendations other than administrative ones to the Board for action.



Team members, clockwise from top: Randy Gordon; Bob Peelle, Vice Chair; Fred Creswick; Peter Hillis, Secretary; Pat Rush; Lorene Sigal; Bill Pardue, Chair. Not pictured: Rikki Traylor. (Photo #98-265-9)

APPENDIX A:

FY 1998 BOARD MEETINGS

DATE	PRESENTATION	SPEAKER
10/1/97	1997 Remediation Effectiveness Report	Paul Hofman, DOE-ORO
10/7/97	Toxic Substance Control Act Incinerator	Bill Rickman
11/5/97	Bear Creek Valley Watershed Strategy	Dave Adler, DOE-ORO
12/3/97	Waste Management Programmatic Environmental Impact Statement	Marty Letourneau, DOE-HQ
1/7/98	Restoring Environments/Creating Opportunities	Joseph Nemec, President, Bechtel Jacobs Company LLC
2/4/98	Canceled due to weather	
2/21/98	ORREMSSAB Process Workshop	Todd Barker, FFERDC Facilitator
3/4/98	No technical presentation, regular business meeting	
4/1/98	Overview of Technology Development Program	John Moore, DOE-ORO
5/6/98	DOE's National Transportation Waste Program	Judith Holm, DOE-HQ
6/3/98	Information on Upcoming DOE Decisions - Intersite Discussion	Sean Todd, DOE-HQ Workshops
7/8/98	Stewardship on the Oak Ridge Reservation	Lorene Sigal, ORREMSSAB; Al Brooks, Oak Ridge Citizen Stewardship Group
8/5/98	FY 1998 Annual Report and FY 99 Work Plan	ORREMSSAB members
9/2/98	Tennessee State Regulatory Perspective	Earl Leming, TDEC DOE Oversight Division

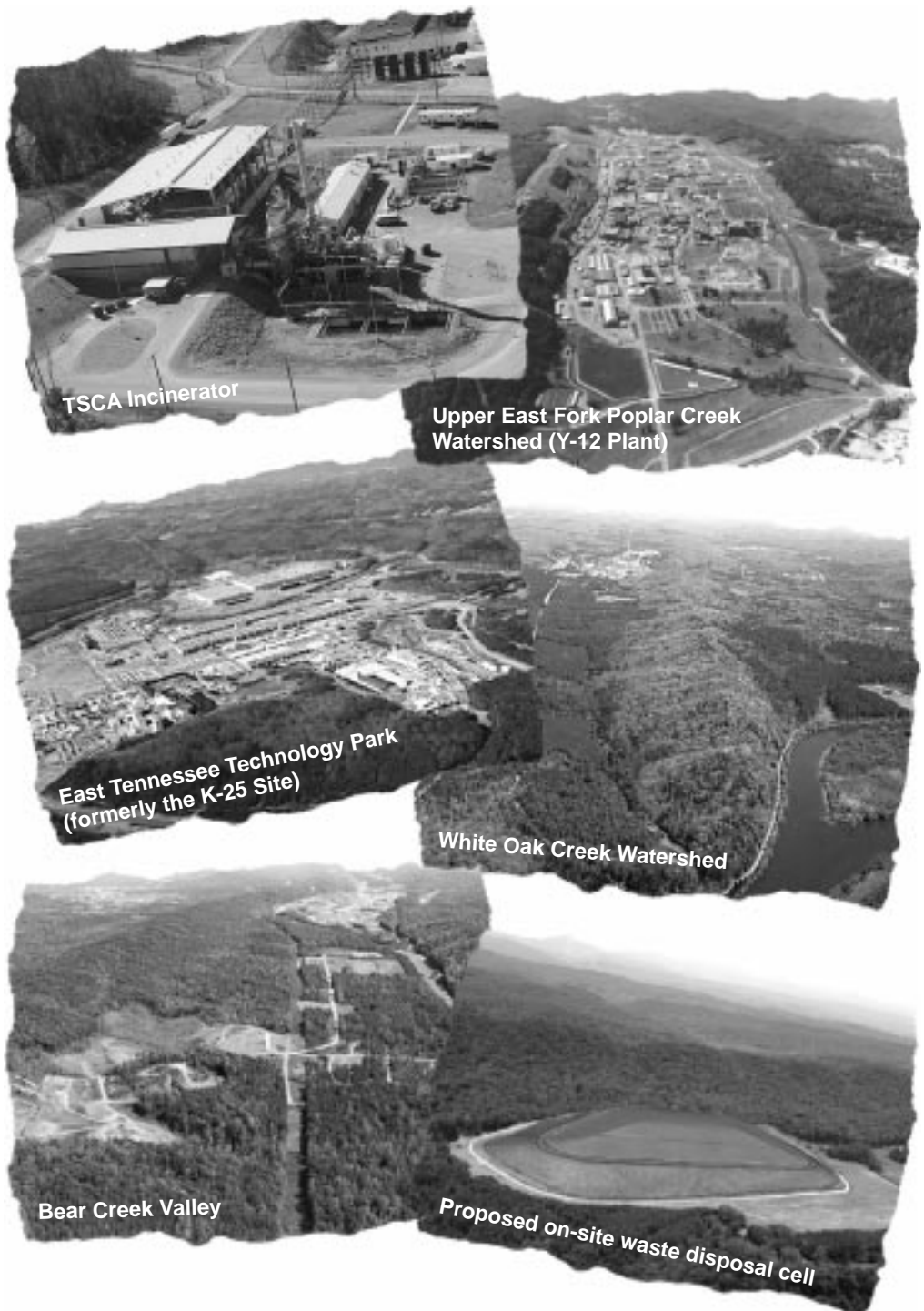
APPENDIX B:

FY 1998 RECOMMENDATIONS

Since its formation in 1995, the Board has studied a variety of issues related to DOE EM activities. Review of an issue often includes detailed briefings in an open forum where Board members and the public may ask questions and discuss their views. Project teams then prepare draft recommendations for Board review, approval, and submittal to DOE. Meetings to prepare and approve recommendations often consume many hours, and all are open to public participation and comment.

Public participation is an integral part of the ORREMSSAB study and recommendation process. Each monthly Board meeting includes time for public input and response, and citizens attending the meetings are invited to ask questions and express views following technical briefings.

During FY 1998, the following recommendations were submitted to DOE-ORO. The recommendations and responses contained herein are abridged. Full text is available on the Board's Web page at <http://www.oakridge.doe.gov/em/ssab>.



RECOMMENDATION 1, DATED 10/1/97

TSCA INCINERATOR WASTE STREAMS MANAGEMENT**BACKGROUND**

The FY 1997 ORREMSSAB Waste Management Committee reviewed waste stream management at TSCAI, including an out-of-compliance mis-shipment of TSCAI ash to the Y-12 Landfill. Based on their study, the following recommendations were submitted to DOE-ORO.

RECOMMENDATION

1. For DOE to review the process used by waste storage personnel to initiate shipment of TSCAI wastes.
2. Waste storage personnel should never fill out forms to initiate the shipment of TSCAI waste; only the generator of the waste should complete the forms.
3. Clearly differentiate, through documentation, between the management and processing of TSCAI waste in storage and newly generated waste.
4. For the Office of EM at the ORR to produce, by the end of FY 1997-98, a TSCAI Fact Sheet incorporating the questions and answers generated during the Waste Management Committee's study of TSCAI. To also provide annual update of this Fact Sheet addressing the same issues (i.e., transportation routes, waste

volumes and types, toxicity levels of treated waste, other sites utilizing TSCAI, sites for final disposal for TSCAI waste, etc.)

5. To develop at ORR an integrated computer system which can track TSCAI waste as it moves from site to site on the facility and leaving ORR.
6. To consider such a system (see #5) DOE Complex nationwide so TSCAI waste can be inventoried and tracked from its generation through treatment, storage, and final disposal.
7. DOE continue to support national forums such as the National Dialogue and specifically request SSABs to work jointly to make coordinated recommendations on state equity issues, which would include among other considerations the shipment and processing of out of state waste at TSCAI.
8. DOE review operations and procedures at all waste transportation and storage operations at the ORR and consider applying recommendations 1, 2, 3, 5, and 6 to all waste streams that are handled in these facilities.

**DOE RESPONSE,
DATED 12/24/97**

1. DOE concurred with recommendation and considered activities associated with this recommendation to be complete.
2. DOE concurred with recommendation. Policies and procedures have been revised.
3. DOE concurred with recommendation. Procedures have been revised.
4. DOE concurred with recommendation. A TSCAI Fact Sheet will be developed.
5. DOE concurred with recommendation. An integrated ORR waste information tracking system is planned for implementation in FY 1998.
6. This recommendation is not within the scope of the ORO Office and should be addressed by DOE-Headquarters (DOE-HQ).
7. DOE will continue to support national forums on U.S. waste management policy.
8. The operating contractor has issued a "lessons learned" alert related to the TSCAI waste incident and reviewed programmatic changes implemented at ETTP for potential incorporation into applicable waste management operations on the ORR.

RECOMMENDATION 2, DATED 11/5/97

SEQUENCING OF EM ACTIVITIES ON THE ORR

BACKGROUND

The Budget and Prioritization Team reviewed the DOE-ORO EM June 1997 *Discussion Draft, Accelerating Cleanup: Focus on 2006*, and other documents related to the DOE-ORO budget and prioritization processes. The objective of the team was to decide if the DOE-ORO sequencing of EM activities is compatible with stakeholder concerns and viewpoints, some of which have evolved since the development of the June 1997 Discussion Draft.

RECOMMENDATION

For the ORR, ORREMSSAB recommends that DOE-ORO EM:

- initiate removal or remedial actions only at sites where there are *significant* releases of contaminants or threats to human health and the environment;
- expedite removal/disposal of stored legacy waste to the Nevada Test Site, Envirocare in Utah; and the Waste Isolation Pilot Plant;
- expedite treatment of stored legacy waste;
- consolidate storage of remaining legacy waste as removal/treatment proceed;
- expedite the decision making process for an onsite waste disposal cell for newly generated CERCLA/RCRA waste which may not be disposed of off site;
- expedite the watershed strategy records of decision for environmental remediation;
- expedite removal of surplus facilities and areas; and
- coordinate similar remedial/removal activities across the ORR.

**DOE RESPONSE,
DATED 5/7/98**

- The prioritization process ranks all subprojects in relation to their impact on human health and the environment, and sequencing considers this ranking.
- The disposal of stored legacy waste is being accelerated. The proposed FY 2000 budget contains funds for this. The ability to accomplish this expedited removal/disposal is dependent upon the availability of the disposal sites.
- Stored legacy waste is being consolidated from the ORNL to the ETTP in FY 1998. The savings from this consolidation will allow acceleration of legacy waste disposal in the future.
- The onsite waste disposal cell is being planned to receive waste generated from CERCLA activities only. The current plan is for this facility to be operational in FY 2001, and a requirement in the most recent sequencing was to adequately fund this subproject for the FY 2001 start date.
- All of the watershed RODs are planned to be approved by FY 2000, and sequencing has adequately funded each watershed ROD.
- The Nuclear Materials Facilities Stabilization Program is funded to stabilize those facilities currently in its inventory. In addition, spent fuel removal is currently underway at the Bulk Shielding Reactor and will be completed in FY 1998. All of the facilities at ETTP will be evaluated to determine if they are candidates for a CERCLA decision. The footprint reduction project is adequately funded to reduce the size of the National Priorities List area by 85 percent by FY 2000.

RECOMMENDATION 3, DATED 12/3/97

CONDUCT OF AN ORR HEALTH EFFECTS STUDY

BACKGROUND

A common thread throughout every issue is the health and safety of ORR workers and nearby residents. ORREMSSAB formed a special project team to devote significant attention to this issue. The team met approximately 20 times over a 2-months period, along with interested members of the public to develop the following recommendation. Team members also attended the DOE-sponsored Oak Ridge Health Research Workshop in Oak Ridge on October 30 and 31, 1997.

RECOMMENDATION

ORREMSSAB recommends that DOE-HQ arrange, as soon as possible, for a major interdisciplinary medical research project in Oak Ridge that includes participation by

university, federal, and other non-profit and private sector organizations. This project should include a clinical study leading to medical diagnosis and referral to appropriate medical treatment of workers and nearby residents who have been exposed to radioactive materials and/or toxins found to exist on the ORR. This study should consider, among other things, the potential clinical effects of chronic low level exposure to radioactive and toxic materials alone and in combination. During the study, emphasis should be placed on case management and potential treatment for those suffering effects from exposure. Information regarding known radioactive materials and toxins at the ORR (including classified information) should be made available to the

researchers. The findings of this study should be submitted for publication in a peer reviewed journal (e.g., *The New England Journal of Medicine*) to ensure that any findings are widely distributed for general application.

A minority report was submitted by Randy Gordon, ORREMSSAB member, who did not agree with the recommendation.

**DOE-HQ RESPONSE,
DATED 1/23/98**

The recommendation was forwarded to the Center for Disease Control and Prevention to evaluate in light of knowledge gained from current studies and evaluations soon to be completed and made available for public review for the Oak Ridge community.

RECOMMENDATION 4, DATED 1/7/98*

COMMUNITY GUIDELINES FOR END USE OF
CONTAMINATED PROPERTIES ON THE ORR**BACKGROUND**

EUWG developed the Community Guidelines for DOE to use in making future use decisions for contaminated properties.

ORREMSSAB subsequently approved and submitted the guidelines to DOE. DOE's remedial activities must include consideration of the community's values, and DOE should explain how the guidelines are incorporated or not incorporated into each of its decisions. The Community Guidelines were endorsed by the Citizens Advisory Panel of the Local Oversight Committee and the Friends of Oak Ridge National Laboratory, two local advisory groups.

RECOMMENDATION

1. Contaminated material left on site, regardless of the site's end use, must be controlled to prevent further spread.
2. The federal government should work with state and local governments, in consultation with the public, to establish and fund a long-term stewardship program for contaminated lands.
3. DOE and its contractors should minimize impacts on the environment during remediation and maximize restoration of the environment after remediation.
4. Areas with residual contamination should have buffer zones that protect current and future nearby populations.
5. End use decisions for contaminated lands should not impede the continuing use and development of ORR lands, and should allow for continuing and future employment and research opportunities.
6. When siting additional facilities, DOE should use brownfield sites instead of greenfield sites.
7. Waste should be relocated only to reduce total risks to human population and the environment.
8. Controls on public access in lieu of remedial actions should be used only in cases where DOE has satisfied the community that further restoration is not feasible.
9. DOE's program offices must coordinate their activities and end use decisions and should provide for meaningful, broad-based public involvement.
10. End use decisions should be re-evaluated as better technologies become available.
11. End use decisions should strive to reduce the amount of land requiring long-term control.
12. End uses of contaminated sites should be compatible with projected uses of adjacent properties.

**DOE RESPONSE,
DATED 4/1/98**

The Community Guidelines were distributed to senior staff and the appropriate watershed teams for consideration/implementation into the CERCLA evaluation and decision-making process.

*The Board subsequently approved the EUWG final report (Recommendation 16), which included guidelines on compliance with applicable state and federal regulations and demolition of structures unsuitable for future use.

RECOMMENDATION 5, DATED 1/7/98

END USE RECOMMENDATION FOR THE DISPOSAL AREAS IN MELTON VALLEY

BACKGROUND

Some of the most highly radioactive waste materials on the ORR are buried in Melton Valley disposal areas. Consideration of any near-term land use other than “restricted access waste disposal” for contaminated Melton Valley lands would require removal and disposal elsewhere of more than 3 million cubic yards of material.

RECOMMENDATION

ORREMSSAB recommends restricted end use for the disposal areas in Melton Valley. Because contaminated areas in Melton Valley are not contiguous, some areas of Melton Valley are usable for DOE-controlled activities.

For this end use, DOE must, at a minimum, ensure safety and control further migration of contamination in Melton Valley to ensure that levels of contaminants released to the Clinch River via White Oak Dam do not exceed standards protective of human health and the environment.

DOE should continue to monitor the major sources of radiological risk in Melton Valley. Such monitoring will indicate when the contaminants have decayed to levels at which additional remediation is feasible.

Radionuclides with half lives of several years to decades, such as tritium, strontium, and cesium, are the major sources of risk in parts of the disposal areas. Within 100 to 300 years, such areas may be candidates for land uses other than restricted.

DOE RESPONSE, DATED 4/1/98

The feasibility study for Melton Valley was drafted in a manner consistent with recommendations provided by the Board, specifically targeting the land use and water resource protection goals contained in the recommendation. The area defined as “restricted” is being made as small as practical to enable DOE to evaluate and engage in further alternative surface land uses outside of the restricted area, depending on changing Department missions, needs for security/access buffers, or other relevant considerations.

RECOMMENDATION 6, DATED 3/4/98

DOE'S SOCIAL, ECONOMIC, AND CULTURAL CATEGORY

BACKGROUND

ORREMSSAB, at the request of DOE-OR EM, considered the merit of continuing to include a "Social, Cultural, and Economic Effects" category with the EMBAM budget prioritization process. DOE-OR EM also suggested that ORREMSSAB undertake to redefine the category. The category was a DOE-HQ directed initiative, but no instructions were supplied on how to define and score it or how it could be applied beneficially to the prioritization process. Headquarters specified a weighting factor of 3 percent for this category.

RECOMMENDATION

ORREMSSAB decided to decline redefinition of the category because it contains complex elements that are very difficult to express quantitatively. ORREMSSAB recommends that the category not be addressed in a quantitative manner in the EMBAM prioritization process. Furthermore, given the weightings of the other categories in the EMBAM prioritization process (i.e., 12 percent and greater), the Social, Cultural, and Economic Category at 3 percent is unlikely to change the ranking of any project.

However, because we recognize the importance of and interest in social, cultural, and economic issues by a broad segment of the public, we suggest the following approach:

1. review each project for potential social, cultural, and economic issues; and
2. when applicable, qualitatively consider social, cultural, and economic issues during the sequencing process.

**DOE RESPONSE,
DATED 5/7/98**

DOE has factored the recommendation into the EMBAM used to prioritize ORO projects. The "Social, Cultural, and Economic" factors during the sequencing process are used as the Board suggested to ensure adequate focus on these aspects of the program.

RECOMMENDATION 7, DATED 3/4/98

ON-SITE WASTE DISPOSAL FACILITY ON THE ORR**BACKGROUND**

Remediation of contaminated areas and buildings on the ORR will generate large volumes of waste materials (up to 1.5 million cubic yards) with varying levels and kinds of contamination. ORREMSSAB believes that DOE must take a balanced approach to the disposal of the contaminated waste materials that requires (1) construction of an onsite waste disposal facility for materials meeting site-specific WAC and (2) disposal offsite for those materials not meeting the WAC.

A balanced approach recognizes that ORR's environmental problems cannot be solved by shipping all of its waste elsewhere. DOE must take into account the concerns of stakeholders at potential receiving facilities and along transportation routes. DOE must also take into account the total costs and risks associated with managing wastes on site versus off site.

RECOMMENDATION

DOE should consider the following criteria when planning an ORR waste disposal facility:

1. The facility should be located on or adjacent to an area that is contaminated and previously used for long-term waste disposal. After consideration of the Community Guidelines, the EUWG conclusions, and the siting recommendation based on summaries of ecological, hydrogeological, and transportation issues prepared by ORREMSSAB, the Board believes that the East Bear Creek Valley site is the most appropriate location for a waste disposal facility.
2. Facility design must safely isolate contaminated materials from the environment.
3. For materials with very low levels of contamination, options for safely managing these materials without elaborate disposal requirements should be given meaningful consideration.

4. Waste disposal capacity should accommodate both current and future volumes of ORR remediation waste.
5. Consideration should also be given to creating disposal capacity for non-remediation wastes. If on-site waste disposal capacity is limited for any reason, the first priority should be given to remediation wastes.
6. Perpetual stewardship of the disposal facility and surrounding property must be assured.
7. Focused stakeholder input should be solicited prior to making decisions regarding facility design, WAC, and acceptance of waste from outside ORR.

**DOE RESPONSE,
DATED 3/31/98**

DOE is drafting the proposed plan required by CERCLA to incorporate the Board's recommendations. The proposed plan will address the need for a balanced combination of onsite and offsite waste disposal practices and will propose an onsite facility at East Bear Creek. In addition, DOE will be holding public workshops in the near future on WAC for the proposed onsite facility.

RECOMMENDATION 8, DATED 3/4/98

**END USE FOR CONTAMINATED LANDS IN
BETHEL VALLEY AREA OF ORNL****BACKGROUND**

ORNL is a national and local resource, whose preservation and growth are an important part of the long-term vitality of the Oak Ridge community. ORNL needs to remain attractive to both current and new uses.

RECOMMENDATION

It is essential that the DOE remediation decisions achieve, at a minimum, a controlled industrial end use for the entire ORNL Bethel Valley area.

A controlled industrial end use should at least provide for surface use of contaminated lands. Currently, there are areas where contamination results in the need for limited access. Reducing such areas would enhance the overall viability of the Laboratory. Remediation should result in lands that are safe for surface use by ORNL employees.

In making its decision, DOE needs to consider the overall utility of ORNL, recognize the variety of uses needed to support an active and vital laboratory environment and use remediation resources wisely. DOE should make the best practical use of existing brownfield sites, and also recognize that not all land needs to be available for every use. If situations occur where DOE cannot meet the surface use criteria due to excessive risks or costs, these exceptions need to be discussed openly in a public forum, as part of the decision-making process.

Implementation of this recommendation by DOE must be consistent with the Community Guidelines and needs for long-term stewardship.

**DOE RESPONSE,
DATED 5/6/98**

As DOE progresses in developing information under the CERCLA process for the Bethel Valley Area of the ORNL, it will address the Board's recommendations in its feasibility study and proposed plan for that area. DOE is in agreement that a controlled industrial end use which allows for surface use of contaminated land (where appropriate) makes sense and that controlled areas should be reduced by remediation in order to enhance the overall viability of the laboratory.

RECOMMENDATION 9, DATED 3/4/98

END USE FOR BEAR CREEK VALLEY WEST OF THE Y-12 PLANT

BACKGROUND

The Bear Creek Valley administrative watershed begins at the western edge of the Y-12 Plant and continues west to just beyond Highway 95. The watershed is about 4,730 acres, of which about 200 acres were used by the Y-12 Plant for waste disposal from 1943 to 1993. The watershed is divided into three zones. The issues related to Zone III, II, and I are listed below along with the recommendation for end use for each zone.

RECOMMENDATION

Zone III includes the land west of the Y-12 Plant for a distance of about three miles. Most of the contaminated areas are north of Bear Creek Road. The main concerns in this zone are the continuing releases of contaminants from the primary waste disposal areas: nitrate from the S-3 Ponds; depleted uranium from the Oil Landfarm Area; and volatile organic compounds from the Bear Creek Burial Grounds. In this zone, the nature of the contamination, and the costs, workers risks and uncertainties associated with its excavation, transport and disposal lead to a recommendation that Zone III lands be safely maintained under restricted use. Remediation in Zone III must reduce the migration of contamination sufficient to bring contaminants in Zone II to within

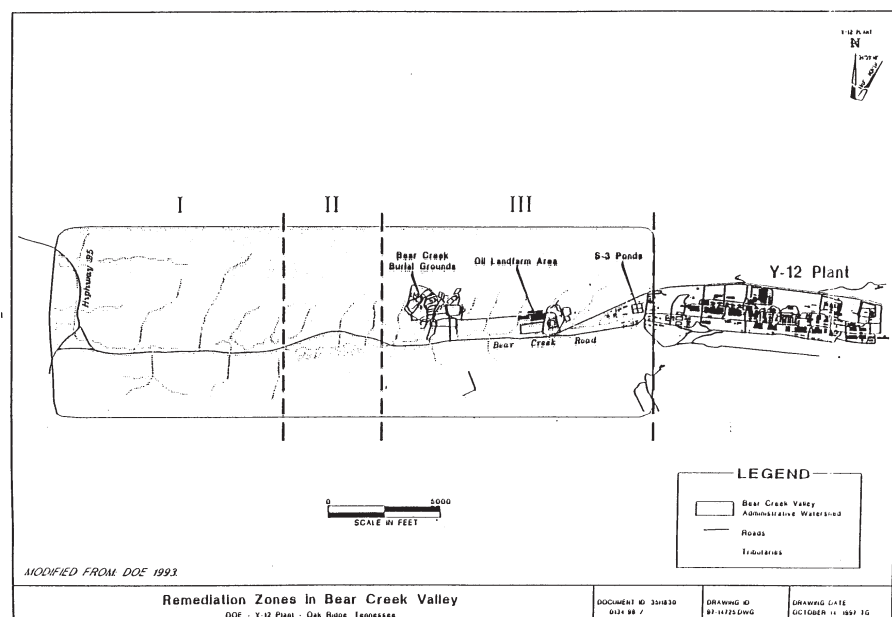
acceptable levels for unrestricted use and protect Zone I for unrestricted use in perpetuity.

Zone II includes the land west of the Bear Creek Burial Grounds for a distance of about one mile. Contaminants in ground and surface water in this zone are chloride, fluoride, nitrate, boron, non-radiogenic strontium and depleted uranium. Concentrations of these contaminants exceed naturally-occurring levels, but rarely exceed environmental standards. Thus, Zone II must be restricted to DOE controlled or recreational end uses until contaminants in ground and surface waters are within acceptable levels.

Zone I is immediately adjacent to and west of Zone II. Land and water in this zone are free from contamination and available for unrestricted use.

DOE RESPONSE, DATED 3/31/98

DOE is addressing the Board's recommendation concerning Bear Creek Valley west of the Y-12 Plant in its proposed plan, which has been drafted in a manner consistent with the land use and water protection goals contained in the recommendation.



RECOMMENDATION 10, DATED 4/1/98

ACCURACY IN DESCRIBING RELATIONSHIPS BETWEEN OAK RIDGE RESERVATION, CITY OF OAK RIDGE, AND SURROUNDING POPULATED AREAS

BACKGROUND

ORR borders Knox and Loudon counties and lies almost entirely within the City of Oak Ridge. The basic situation has not changed since the city incorporated in 1959, though some areas have been annexed and the populations of nearby areas continue to rise. Many documents prepared for DOE-ORO speak in some way of the distance from the reservation to nearby Oak Ridge and reflect other cities as dots on compressed maps. While occasional flaws are anticipated in draft documents, populations near the reservations need to be properly represented.

RECOMMENDATION

ORREMSSAB recommends that DOE-ORO EM routinely notify contractors of the actual geographic boundaries of the ORR and the City of Oak Ridge. On an appropriate scale, the geographical extent of nearby cities should also be shown. Accuracy is required in describing the relation of operations on the ORR to any municipal entity.

As for properly representing the relationship of any ORR release points to the surrounding population, basic population maps need to be prepared. Broader scale maps showing the smallest census units could be shaded to illustrate the varying population density. Enlarged fine-scale maps could roughly represent streets and/or dwelling units, providing

approximate shading related to population. At every map scale an appropriate wind rose should be printed, obtained at a stated position and altitude, to indicate the prevailing air movement patterns. In any case the reader should be encouraged to appreciate the density of the nearby population. Streams should also be clearly indicated.

DOE RESPONSE, DATED 4/29/98

DOE has advised all the DOE Oak Ridge programs of the Board's request to make proper references to the City of Oak Ridge boundaries and populations near the reservation on future DOE maps. Additionally, all contractor and subcontractor organizations will be provided a copy of the Board's recommendation.

RECOMMENDATION 11, DATED 4/1/98

DRAFT ACCELERATING CLEANUP PATHS TO CLOSURE, DATED FEBRUARY 1998

BACKGROUND

The following recommendation was based on the Budget and Prioritization Team's review of the draft DOE-ORO document *Accelerating Cleanup, Paths to Closure*. ORREMSSAB's goal was to help the DOE EM Program provide the interested public with an understandable planning document for remediation of contaminated areas.

RECOMMENDATION

ORREMSSAB provided substantive and editorial comments. The substantive comments drew attention to the content of the document. The editorial comments simplified and/or clarified ideas and sentences. A mark up copy of the document was also provided to DOE.

DOE RESPONSE, DATED 6/30/98

Many of the Board's comments were incorporated into the document. A comment/response document was attached addressing each of the Board's specific comments.

RECOMMENDATION 12, DATED 5/6/98

COMMENTS AND RECOMMENDATIONS ON THE BEAR CREEK VALLEY FEASIBILITY STUDY AND PROPOSED PLAN

BACKGROUND

The following recommendation is based on ORREMSSAB's FFA Appendix E Documents Project Team's detailed review of the *Feasibility Study and Proposed Plan for Remediation of the Bear Creek Valley at the Y-12 Plant*. (See map in Recommendation 9.)

RECOMMENDATION

The proposed plan is generally acceptable, with the following reservations:

1. the long-term remedial action objective should be upgraded to include eventual unrestricted use of Zone 2, as recommended by EUWG and approved by ORREMSSAB;

2. a two-stage ROD is acceptable but a schedule should be established for the second stage;
3. long-term stewardship, including the safeguarding of archival information, needs to be addressed more fully; and
4. the preferred alternative should have a title.
3. A Land Use Controls Assurance Plan is under development, which will address long-term stewardship for the ORR and will be enclosed with the ROD.
4. We agree that passive water treatment is more desirable than active and are currently involved in a demonstration of passive water treatment technologies at the S-3 Site.

DOE RESPONSE, DATED 6/19/98

1. The goal for Zone 2 now reads, "Improve groundwater quality in this zone consistent with eventually achieving conditions compatible with unrestricted use."
2. A tentative schedule of FY 2001 for the second ROD has been discussed with EPA and TDEC; however, we will not be able to finalize this until September after our budget baselining efforts are completed.
5. The preferred alternative, as described in the D3 proposed plan, draws primarily from Alternatives 5 a, b, and c but, of course, does not include a proposed remedy for the Bear Creek Burial Grounds.

RECOMMENDATION 13, DATED 6/3/98

END USE RECOMMENDATION FOR Y-12 PLANT, CHESTNUT RIDGE, AND UPPER EAST FORK POPLAR CREEK

BACKGROUND

Using the industrial complex at the Y-12 Plant in a manner that is safe and protective of human health and the environment is important to the long-term vitality of the Oak Ridge community. For the foreseeable future, ongoing missions for the Y-12 Plant and Chestnut Ridge dictate uses for much of the property.

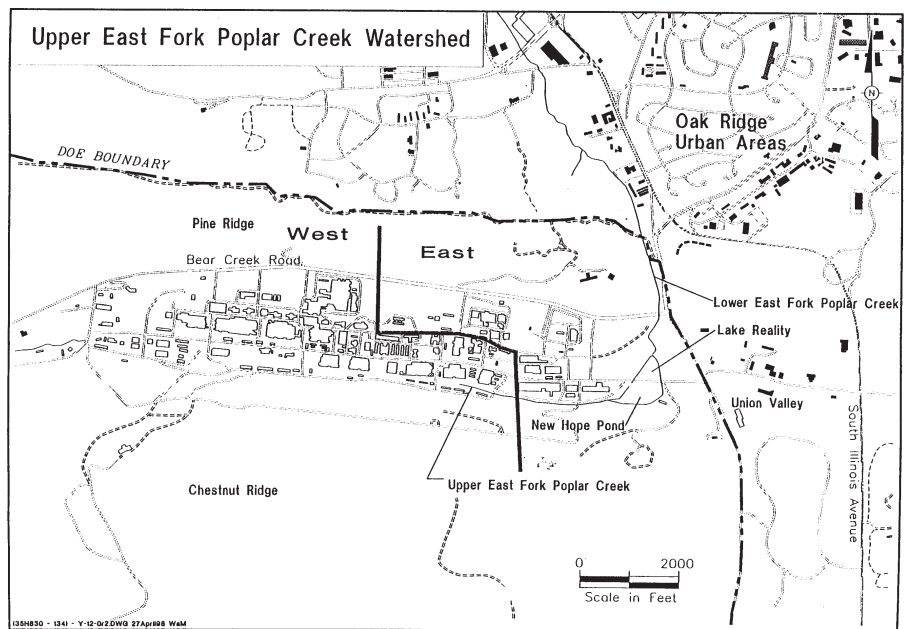
RECOMMENDATION

The following recommendations are made for the Y-12 Plant, Chestnut Ridge, and Upper East Fork Poplar Creek (numbers do not imply priority):

1. The western area of the Y-12 Plant is expected to remain controlled industrial property. As opportunity arises, national security activities should be concentrated in the western area to allow for the broadest possible use of the rest of the plant.
2. The eastern area of the Y-12 Plant should be made suitable for uncontrolled industrial use.
3. Lake Reality and the RCRA-closed New Hope Pond will require continued federal government control. Use of these sites should be consistent with end uses for the eastern area of the Y-12 Plant (i.e., for parking or other non-intrusive uses).
4. The Chestnut Ridge property should continue to be used and safely maintained for regulated waste disposal for the ORR.
5. Upper East Fork Poplar Creek, its tributaries, and surface waters on Chestnut Ridge must eventually meet state water quality standards. In the interim, water quality must not pose an unacceptable risk to: (a) industrial workers at the Y-12 Plant, and (b) residential and commercial users surrounding the Lower East Fork Poplar Creek and its tributaries.
6. Contaminated groundwater from the Y-12 Plant and Chestnut Ridge must be controlled by the federal government such that it does not permanently impact the use of currently uncontaminated groundwater.

DOE RESPONSE, DATED 7/13/98

In general, DOE finds the recommendations to be quite reasonable and will ensure that they are addressed in the feasibility study for evaluation.



RECOMMENDATION 14, DATED 7/8/98:

END USE RECOMMENDATION FOR SITES NOT INCLUDED IN EXISTING WATERSHEDS

BACKGROUND

There are a number of sites whose remediation is being considered separately from the five existing administrative watersheds. These sites include but are not limited to: (1) White Wing Scrap Yard, (2) Molten Salt Reactor Experiment facility, (3) High Flux Isotope Reactor, (4) Homogenous Reactor Experiment facility, and (5) Cesium Plots.

RECOMMENDATION

It is recommended that DOE use the Community Guidelines in making future end use decisions for such sites. Particular attention should be given to selecting an end use that is consistent with end uses of adjacent property.

In particular, because the White Wing Scrap Yard is surrounded by uncontaminated land, it should be remediated to allow for unrestricted use.

Use of the reactor sites in Melton Valley should be consistent with Melton Valley recommendations for government-controlled industrial use. In addition, the Cesium Plots lend themselves to remediation that allows for an unrestricted end use.

Implementation of these recommendations by DOE must be consistent with the Community

Guidelines and needs for long-term stewardship. If DOE cannot meet these recommendations, exceptions must be discussed in a public forum as part of the decision-making process.

DOE RESPONSE

Response is forthcoming.

RECOMMENDATION 15, DATED 7/8/98

END USE RECOMMENDATION FOR EAST TENNESSEE TECHNOLOGY PARK

BACKGROUND

This end use recommendation for the former K-25 Site at ETTP applies to the site following remediation. It does not apply to the current reindustrialization of the site or TSCAI. This recommendation precedes the CERCLA remedial investigation; thus, information regarding the scope and extent of contamination is incomplete but adequate for an end use determination. The federal government will maintain ownership of the property and is responsible for managing residual contamination and stewardship.

RECOMMENDATION

The following four recommendations are made (numbers do not imply priority):

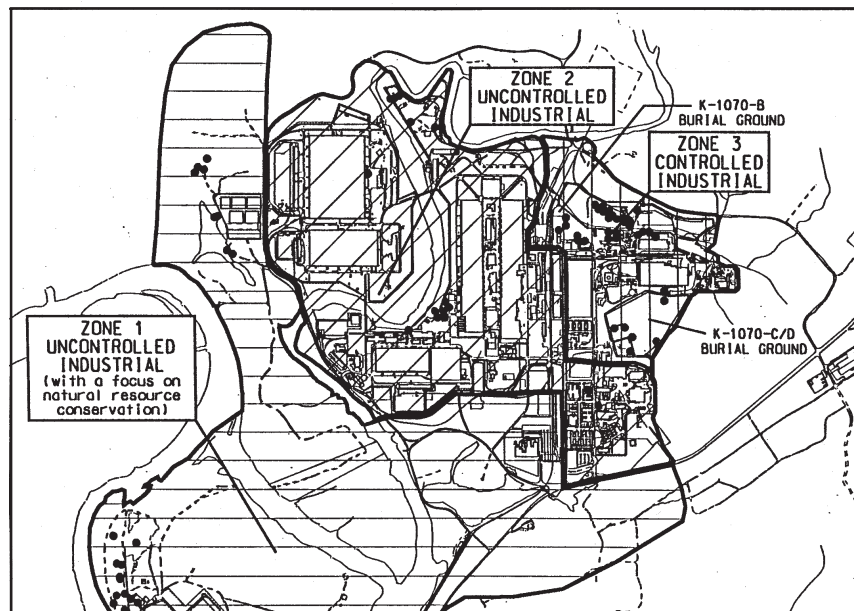
1. Zone 1 should be remediated to allow for uncontrolled industrial end use, with a focus on natural resources conservation.
2. Zone 2 should be remediated to provide for uncontrolled industrial end use.
3. Zone 3 should be remediated to provide for controlled industrial end use. If the existing K-1070 B

and K-1070 C/D waste disposal areas in Zone 3 cannot be fully remediated to controlled industrial end use, then these areas should be maintained as restricted access waste disposal properties and should be managed to ensure the safety of surrounding populations and the environment.

4. The continued storage of UF₆ is not compatible with these recommended end uses. This incompatibility should be resolved on a schedule that coincides with the planned remediation of the site.

DOE RESPONSE

After review of the recommendation we find them to be acceptable and applicable to decision making for the DOE Environmental Management cleanup program. The recommendations will be incorporated into the ongoing efforts to complete the Comprehensive Environmental Response, Compensation, and Liability Act feasibility study of alternatives for cleaning up the site and the environmental impact statement evaluating appropriate strategies for managing the uranium hexafluoride containers.



RECOMMENDATION 16, DATED 8/5/98

ENDORSEMENT OF THE END USE WORKING GROUP'S FINAL REPORT

BACKGROUND

The ORR EUWG, a broadly based, voluntary citizens group, was formed in January 1997 to develop and evaluate guidelines and recommendations for future uses of contaminated areas of the ORR following their remediation. The group's *Final Report of the End Use Working Group*, published in July 1998, documents the history and purposes of EUWG, outlines the process used to make recommendations, describes the recommendations, and highlights the need for long-term stewardship.

RECOMMENDATION

At our August 5, 1998 Board meeting, the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) endorsed the *Final Report of the Oak Ridge Reservation End Use Working Group* (EUWG) dated July, 1998.

The ORREMSSAB has previously approved and forwarded to the Department of Energy (DOE) the EUWG's Community Guidelines and all of the EUWG's recommendations on end use for contaminated lands on the Oak Ridge Reservation. The Board encourages DOE to continue to utilize these recommendations as the remediation efforts of the Oak Ridge Reservation continue.

We thank you, DOE staff, and contractor staff for your strong support of the EUWG. The EUWG process was a very positive and worthwhile experience for the Oak Ridge stakeholders who participated

DOE RESPONSE

DOE response is forthcoming.

RECOMMENDATION 17, DATED 8/5/98

ENDORSEMENT OF THE END USE WORKING GROUP'S *STAKEHOLDER REPORT ON STEWARDSHIP*

BACKGROUND

As EUWG deliberations progressed in 1997–1998, it became apparent that some level of radioactive and chemically hazardous contamination would remain on the ORR and that a stewardship program would be needed to protect human health and the environment from future risks associated with the contamination. Recognizing the complexity of such a task, EUWG formed a committee to develop stewardship recommendations. This committee was joined by the Stewardship Committee from Friends of Oak Ridge National Laboratory and members of the Local Oversight Committee's Citizens' Advisory Panel in studying the subject. In July 1998, the combined committees issued the *Stakeholder Report on Stewardship*.

The report describes the need for and the basic elements of a stewardship program, its application to the ORR, and stakeholder roles and responsibilities.

RECOMMENDATION

At our August 5, 1998 Board meeting, the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) endorsed *The Oak Ridge Reservation Stakeholder Report on Stewardship* dated July, 1998. The report was prepared by the End Use Working Group (EUWG) Stewardship Committee in collaboration with the Friends of Oak Ridge National Laboratory Stewardship Committee. The EUWG as a whole adopted the report.

On pages 45 and 46, Section 5.7, is the Summary of Key Recommendations, explained at various points in the report, for Stewardship on the Oak Ridge Reservation. The recommendations propose Department of Energy (DOE) actions for the near term; DOE responses to the proposed actions will be evident in forthcoming Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) documentation.

We thank you, DOE staff, and contractor staff for your strong support of the EUWG.

DOE RESPONSE

DOE response is forthcoming.

RECOMMENDATION 18, DATED 9/2/98

USE OF IN SITU VITRIFICATION ON THE ORR

BACKGROUND

In situ vitrification (ISV) was chosen for use at ORNL's Pit 1, and operations at the site began in November 1992. During the initial melt at the site in April 1996, a fire occurred, which was caused by an upheaval of steam and molten glass on and around the off-gas collection hood. Although no personnel injuries occurred, and loss of off-gas containment was minimal, DOE decided not to complete the two remaining melts originally planned at Pit 1. Through study of that event and of the ISV technology, the ORREMSSAB Technology Development and Deployment Project Team drafted the following recommendation, which was approved by the Board and sent to DOE.

RECOMMENDATION

Members of the Oak Ridge Reservation Environmental Management Site Specific Advisory Board (ORREMSSAB) Technology Development and Deployment Project Team recently reviewed the *Proposed Plan for Bear Creek Valley at the Oak Ridge Y-12 Plant, Oak Ridge, Tennessee* (DOE/OR/02-1647&D3), in which in situ vitrification (ISV) is proposed for

use in that watershed. As a result of study of that document and of ISV, ORREMSSAB recommends use of the technology in remediating appropriate Oak Ridge Reservation (ORR) sites and proposes that the U.S. Department of Energy (DOE) go forward with an incremental approach to ISV use on the reservation. By incremental, we mean starting with a single, modest-scale project in a carefully chosen area. Study of the area is crucial due to the hydrogeological makeup of the ORR.

ORREMSSAB has studied ISV as a technology for application by DOE in remediation of contaminated sites on the ORR. In February of this year the Technology Development and Deployment team hosted a public meeting on ISV at which representatives from the Geosafe Corporation presented a program on the technology and answered questions from the team, ORREMSSAB, and the public. We are acquainted with the results of the ISV demonstration at Oak Ridge National Laboratory in Melton Valley last year and with doubts about the technology in the minds of some members of the public.

Because ISV is proposed for use in Bear Creek Valley, we suggest the demonstration be held there. The ISV trial could be divorced from the current Record of Decision for Bear Creek, allowing the demonstration to take place in the Bear Creek Valley Burial Grounds. Should this site prove unsuitable for hydrogeological or regulatory reasons, we recommend the demonstration go forward in another location on the ORR.

DOE RESPONSE

DOE response is forthcoming.

APPENDIX C

ABBREVIATIONS

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOE	U.S. Department of Energy
DOE-HQ	DOE-Headquarters
DOE-ORO	DOE-Oak Ridge Operations
EM	Environmental Management
EMBAM	Environmental Management Benefit Assessment Matrix
EPA	U.S. Environmental Protection Agency
ETTP	East Tennessee Technology Park
EUWG	End Use Working Group
FFA	Federal Facility Agreement
FY	fiscal year
IRC	Information Resource Center
ISV	in situ vitrification
ORNL	Oak Ridge National Laboratory
ORR	Oak Ridge Reservation
ORREMSSAB	Oak Ridge Reservation Environmental Management Site Specific Advisory Board
RCRA	Resource Conservation and Recovery Act
ROD	Record of Decision
TDEC	Tennessee Department of Environment and Conservation
TRI GIS	Toxic Release Inventory Geographic Information Survey
TSCAI	Toxic Substances Control Act Incinerator
WAC	waste acceptance criteria

ORREMSSAB MEMBERS AND STAFF



ORREMSSAB members and staff, left to right, top row: Dr. John Stockwell, Rikki Traylor, Fred Creswick, Steve Kopp, Randy Gordon, Jack Bowden, Bill Pardue, Peter Hillis, Rod Nelson, Pat Rush. Bottom row: Charles Washington, Sheree Black, Bob Peelle, Marianne Heiskell, Ken Parks, Lorene Sigal, Donna Campbell, John Owsley. Not pictured: Joe Alexander and Demetra Nelson.

Joe Alexander, Knoxville. Joe is owner of Off Road Equipment Parts and is the former Vice President of Royal Brass and Hose in Knoxville. Joe also raises beef cattle in Loudon County.

Jack Bowden, Lenoir City. Jack is a beef cattle farmer and is the former owner of Bowden Greenhouses. He is retired from the U.S. Army Reserves (35 years) and is a member of the Lenoir City Chamber of Commerce.

Donna Campbell, Harriman. Donna is a librarian for Foster Wheeler Environmental Corporation in Oak Ridge. She was an instructor of general biology, zoology, and botany on the faculty at the College of William and Mary and librarian at several libraries.

Frederick A. Creswick, Ten Mile. Fred is a retired mechanical engineer, with expertise in research and development on energy use and emission control of end-use technologies.

Randy Gordon, Ten Mile. Randy is self-employed and runs Abco Screen-Print and Embroidery and Blue Springs Realty in Ten Mile. He served as a councilperson and vice-mayor for the city of Kingston, where he worked with EPA on several issues affecting the area.

Peter Hillis, Kingston. Peter is a pipefitter for Lockheed Martin at ORNL in the Radiochemical Engineering Development Center. He is pursuing a degree in waste management at Roane State Community College.

Steve Kopp, Knoxville. Steve works as the manager of Environmental Services for Parsons Infrastructure and Technology Group, Inc. He is an attorney with more than 20 years experience and is the Chair of the Citizen Advisory Panel of the Local Oversight Committee.

Demetra Nelson, Oak Ridge. Demetra works as a senior scientist (biochemist) for Radian International. She is a member of Spurgeon Chapel AME Zion Church and Alpha Kappa Alpha Sorority Inc.

Bill Pardue, Oak Ridge. Bill is retired from the nuclear research and development field and is currently consulting for the environmental industry. He is a member of the East Tennessee Environmental Business Association and a former member of the Community Reuse Organization of East Tennessee.

Kenneth E. Parks, Kingston. Ken is a truck driver for Lockheed Martin and is a member of the Teamsters Union. He is a former member of Kingston City Council and is currently a member of the Tennessee Auctioneers Association.

Bob Peelle, Oak Ridge. Bob is a retired nuclear physicist from ORNL. He served for 22 years as a member of the Roane County Commission and is a member of the League of Women Voters. He currently serves as a member of the Oak Ridge Health Agreement Steering Panel.

Pat Rush, Oak Ridge. Pat has served on the Oak Ridge City Council since 1987. She holds a degree in physics and mathematics.

Lorene Sigal, Oak Ridge. Lorene is retired from ORNL, having worked in the Environmental Sciences Division as an ecologist. Her background includes providing technical support to the DOE Office of NEPA Oversight.

Rikki Traylor, Knoxville. Rikki is a homemaker, and her background includes teaching and research. Rikki is presently active in a number of zoning issues and is a member of the Citizen's Clearing House for Hazardous Waste and Amnesty International.

Charles A. Washington, Sr., Oak Ridge. Charles is an environmental engineer for Lockheed Martin in the Clean Air Compliance Group at Y-12. He holds BS and MS degrees in chemistry and is particularly interested in the impacts of DOE's activities on the Afro-American community.

Ex-officios and staff: Rod Nelson, Deputy Designated Federal Official; Marianne Heiskell, DOE Ex-officio; Dr. John Stockwell, EPA Ex-officio; John Owsley, TDEC Ex-officio; Sheree Black, SSAB Support Office.



Oak Ridge Reservation Environmental Management

Site Specific Advisory Board

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